

SWIM Connect 2014 Get Plugged In...

*Future SWIM:
NAS Common Reference*

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Federal Aviation
Administration

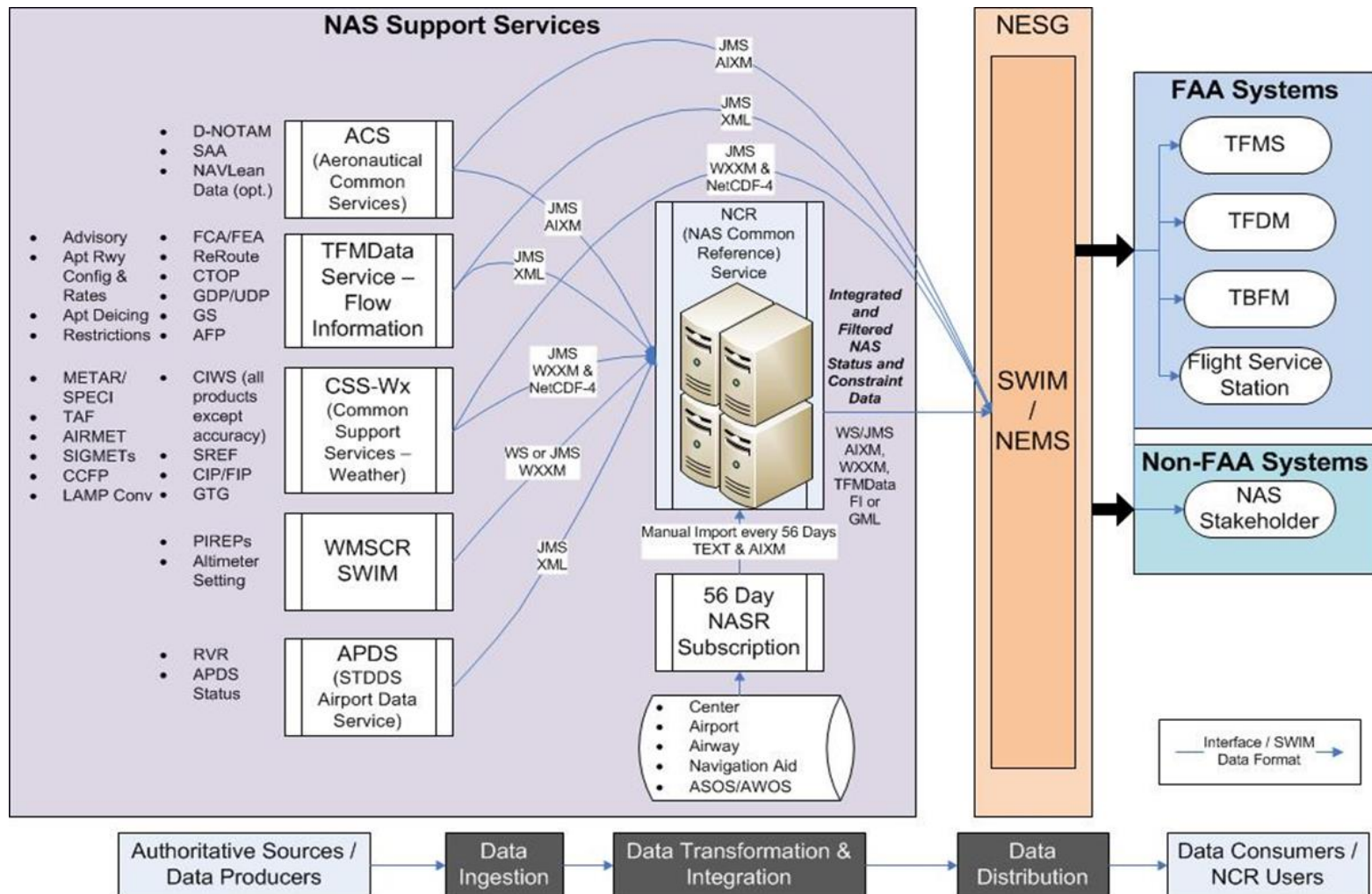
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NCR Snapshot

- Integrates NAS status and constraint information from cross-domain sources;
- Provides a unified, application-level interface to obtain filtered subsets of the information via request or subscription;
- Supports 4D trajectory query in addition to flexible combinations of spatial, temporal, and scalar constraints; and
- Creates a consistent, spatially and temporally correlated “view” of NAS information

NCR Functional Architecture



Summary of NCR Functions

- Provides one-stop shop for an integrated picture of NAS status and constraint data to include:
 - Weather
 - Static Aeronautical information (Centers, Sectors, etc.)
 - NOTAMs
 - SUAs
 - TMIs
 - Advisories
 - Airport configuration/rates
 - RVR
- Available as a data service that can be integrated with other systems/displays, such as TSD, or directly via a web application.

Summary of NCR Functions, cont.

- Can submit one of two types of requests to NCR to get a user-specified filtered subset of the NAS-wide data across all supported data sources.
 - Trajectory Query:
 - Can submit a route of flight, along with departure time and cruising speed and altitude, and get all NAS status and constraint data relevant to that trajectory in time and space.
 - Ad-Hoc Query:
 - Can submit any combination (all are optional) of the following filters to get exactly the data needed to support your decision making:
 - Time range
 - Geographic area (polygon, circle, line, point)
 - Altitude range
 - Any combination of property filters (e.g. probability of convection > 60% or airport = KIAD)

Common Support Services High Level Architecture

